

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of
Yoshiki HASHIZUME et al.

Application No.: 10/525,068

Confirmation No.: 5831

Filed: February 18, 2005

Art Unit: 1793

For: ALUMINUM PIGMENT, METHOD OF
MANUFACTURING THE SAME AND RESIN
COMPOSITION

Examiner: S. ABU ALI

DECLARATION UNDER 37 CFR 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Madam:

I, Yoshiki HASHIZUME, declare and say as follows:

I graduated from Kyoto University, Faculty of Engineering, in March 1975. Since April 1976, I have been employed by Toyo Aluminium Kabushiki Kaisha, engaged in research and development of aluminum materials (aluminum paste, aluminum powder, aluminum nitride powder, etc.) Currently, I am a Manager, Research & Development Dept., Core Technology Center.

I am familiar with U.S. Application Serial No. 10/525,068, of which I am a co-inventor. I have reviewed all Office Actions issued in connection with this application. I have also reviewed all of the references cited by the Examiner in these Office Actions.

The following shows that the present invention is superior and exhibits unexpected and advantageous properties over the prior art of record (Jenkins et al. (U.S. 5,637,143); Schmid et al. (U.S. 5,364,467); Mei et al. (U.S. 6,894,089); and Shimizu et al. (U.S. 4,842,837)).

Applicants' Examples and Comparative Examples described in the original disclosure of Application No. 10/525,068 show that superior results are obtained when combining three coatings (i.e., molybdenum, silica and a silane coupling agent), as compared to the case where only one coating or two coatings is/are applied.

The present invention

Example 10

Example 10 describes an aluminum pigment according to the present invention, wherein three coats are formed over the aluminum particles (i.e., (i) a molybdenum coat, (ii) a silica coat and (iii) a coat prepared from a silane coupling agent). Example 10 represents presently pending claim 1.

The prior art of record

Comparative Example 3

Comparative Example 3 describes a pigment corresponding to that disclosed by Jenkins '143. In Comparative Example 3, only one coat is deposited over the particles (i.e., a molybdenum coat).

Referential Examples 1-3 and 5-8

Referential Examples 1-3 and 5-8 correspond to the pigment disclosed by Schmid '467, comprising two coats disposed over the particles ((i) a molybdenum coat and (ii) a silica coat).

Referential Example 4

Referential Example 4 corresponds to Mei '089, and describes a pigment comprising two coats, namely, (i) a molybdenum coat, and (iii) a coat prepared from a silane coupling agent.

Comparison between the present invention and the prior art of record

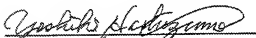
Tables 4-6, described at pages 38 and 39 of Application No. 10/525,068, show the superior and unexpected results obtained by the aluminum pigment according to the present invention.

As evidenced by Tables 4-6, only the pigment of Example 10 (corresponding to present claim 1) was ranked as superior (i.e., a rating of "5") in terms of both the color tone of the painted plate and the base adhesion of the film (moisture resistance/adhesiveness) (note that Example 9 corresponds to an additional embodiment of the present invention). Furthermore, the pigment of Example 10 generates absolutely no gas.

The pigments of Referential Examples 1-8 and Comparative Example 3 may exhibit either a good color tone of the painted plate or good moisture resistance/adhesiveness, but none of them exhibit superior results in terms of both of these properties.

It is my opinion that this evidence shows that the present invention is superior and exhibits unexpected and advantageous properties over the prior art of record.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


Signature

Yoshiaki HASHIZUME

Typed or Printed Name

July 10, 2009
Date